Kerosene Blending

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Kerosene Blending

- Many terminals, particularly in the Northeast, blend kerosene into diesel fuel during the winter.
- It is a cost effective, efficient means of providing the fuel with the proper cold weather properties.

Availability of Ultra-Low Sulfur Kerosene

- The sulfur content of most kerosene currently is 400 ppm and, of course, that product may not be blended with 15 ppm diesel fuel.
- The regulations do not require refiners and importers to produce or import kerosene meeting the 15 ppm sulfur standard.
- These regulations assume that industry will reduce the sulfur content of kerosene as well as diesel fuel.
- The preamble states that the market will drive the production of this ultra-low sulfur product and make it available during the winter in the Northeast.

Availability of Ultra-Low Sulfur Kerosene (continued)

- Terminals in the Northeast are very concerned about whether ultra-low sulfur kerosene will be readily available.
- One of the problems with kerosene is that its demand is very volatile. Commonly used in the Northeast to blend into heating oil for outside storage and as a stand alone fuel in kerosene burners.
  - Demand increases exponentially with decreases in temperature
  - In an extended cold snap –there will be competing demands for the fuel – on and off-road uses
  - Both products need to be fungible
- Likely, refiners will produce, and, at least, one pipeline is expected to carry it.
- However, if there is not enough demand, the only way to bring the product to the terminals is by barge or truck.
- Such methods are very expensive.

Kerosene Standard

- The regulations provide that kerosene used for blending with 15 ppm sulfur or 500 ppm sulfur diesel fuel is itself required to meet the 15 ppm sulfur or 500 ppm sulfur standard.

Kerosene Blender

- Generally, when a company blends components to make fuel, EPA considers that entity a “refiner” and requires it to meet all the obligations of a refiner.
- However, under the diesel sulfur rules, a “kerosene blender” -- an entity that blends kerosene into diesel fuel and does not alter the fuel in any other way, except as to its viscosity -- is not considered a “refiner.”

Verification of 15 ppm Kerosene

- When a kerosene blender blends 15 ppm kerosene into 15 ppm diesel fuel, the blender must have either:
  - Product Transfer Document (“PTD”) indicating the sulfur content is 15 ppm; or
  - Test results demonstrating compliance with the 15 ppm standard.

Continued Use of Kerosene vs. Additives

- Assuming that ultra-low sulfur kerosene is available and can be shipped by pipeline, kerosene blending will continue.
- However, if 15 ppm kerosene is scarce or can only be shipped by barge or truck, terminals may have to obtain an alternative means of dealing with the winterization of the fuel -- chemical additives.

Continued Use of Kerosene vs. Additives (continued)

- Terminal operators should plan for that eventuality and determine which, if any, additives best provide:
  - Desired fuel properties;
  - Sulfur content that is low enough to ensure the entire blend meets the sulfur standards; and
  - Least additional cost.
- In some northern states, the use of an additive alone will not meet the needs for winter operability. The only way to get to the ASTM cloud point specifications (10th percentile in Maine in January = - 15f) is with the introduction of kerosene.